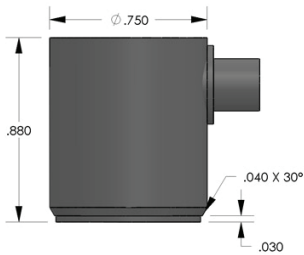


R6α Sensor

General Purpose, 60 kHz Resonant Frequency Sensor



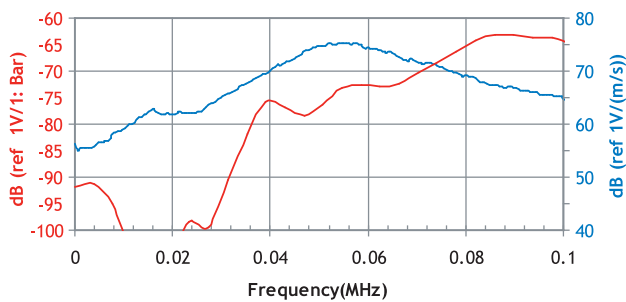
DESCRIPTION AND FEATURES

The R6α is a narrow band resonant sensor with a high sensitivity. The sensor cavity is machined from a solid stainless steel rod, making the sensor extremely rugged and reliable. The ceramic face along with a 30 degree chamfer to cavity electrically isolates the sensor cavity from the structure under test assuring a low noise operation.

The compact size of the sensor makes it readily suitable for deploying in tight spaces for monitoring. The Alpha series family of sensors features an SMA connector versus the Microdot connectors found on MISTRAS' RXX series of sensors. The alpha series includes R3α, R6α, R15α, R30α, R50α, R80α and WSα sensors.

APPLICATIONS

This sensor can be used on metal and FRP structures such as pipelines or storage tanks in petroleum, refineries, chemical plants, and offshore platforms, due to its high sensitivity and low resonance frequency properties.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s)	75 dB
Peak Sensitivity, Ref V/μbar	-64 dB
Operating Frequency Range	35-100 kHz
Resonant Frequency, Ref V/(m/s)	55 kHz
Resonant Frequency, Ref V/μbar	90 kHz
Directionality	+/-1.5 dB

Environmental

Temperature Range	-65 to 175°C
Shock Limit	500 g
Completely enclosed crystal for RFI/EMI immunity	

Physical

Dimensions	0.75" OD X 0.88" H 19 mm OD X 22.4 mm H
Weight	38 grams
Case Material	Stainless steel
Face Material	Ceramic
Connector	SMA
Connector Locations	Side
Seal	Epoxy

ORDERING INFORMATION AND ACCESSORIES

R6α	R6α or R6a
Magnetic Hold-Down	MHR15A
Sensor to Preamp Cable (1 or 2 meters)	1232-X-SMA
Amplifier subsystems ... AE2A, AE5A or standard AE systems	
Preamplifier	0/2/4, 2/4/6
Preamp to System Cable (specify length in 'm')	1234 - X

Sensors include

NIST Calibration Certificate & Warranty

